



Attorney Docket: 178/48916
PATENT

#16 Declaration
6/26/02
K. Butt

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: GUNNAR-MARCEL KLEIN ET AL.
Serial No.: 09/555,140 Group Art Unit: 1728
Filed: AUGUST 3, 2000 Examiner: M. SAVAGE
Title: FILTER ELEMENT

DECLARATION UNDER 37 C.F.R. §1.132

Commissioner for Patents
Washington, D.C. 20231

Sir:

I, Dr. Gunnar-Marcel Klein, hereby state:

1. I am a German citizen, residing at Meisenweg 3, D71579 Spiegelberg, Germany.
2. I have a doctorate (Dr.-Ing.) in the field of filtration technology. I am fluent in the English language.
3. From 1991 to 1997, I was a scientific worker at Stuttgart University and Stuttgart-Hohenheim University.
4. From 1997 to 1999, I worked in the Basic Development Department of FILTERWERK MANN & HUMMEL GMBH.
5. From 1999 to the present, I have worked in Management of liquid filter development at FILTERWERK MANN & HUMMEL, GMBH.
6. I have authored more than ten scientific papers in the field of transverse flow filtration, sorting technology, and filtration in vehicles.

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7. Based on my education and experience as briefly set forth herein, I am an expert in the field of filtration technology.

8. I am familiar with the filter element disclosed and claimed in United States patent application No. 09/555,140 (the subject application).

9. I was advised that the subject application was rejected in an Official Action as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, I was advised that the Official Action stated that the specification fails to adequately disclose how to make the claimed filter element having the recited weight per unit area values of the inflow and discharge layers since the thickness or density of the inflow and discharge layers has not been disclosed.

10. Based upon my education and experience in the field of filtration technology, it is my opinion that the specification of the subject application adequately discloses how to make the claimed filter element to one of ordinary skill in the art.

11. I agree with the inventors that the claimed filter element can be made and used as long as the specific weights (weights per unit area) of the filter element's inflow and discharge layers are within the respective claimed ranges, because in the claimed invention only the specific weights of the filter layers are important to achieve optimum filtration. Knowledge of the filter layers' thickness or density, on the other hand, is not necessary to make or use the claimed filter element. As long as the specific weight of a filter layer is given, one with ordinary skill in the art can vary the thickness or density on the basis of other parameters, such as the coarseness and kind of fibers as well as the structure and arrangement of the fibers in the fiber layers. Alternatively, for a given specific weight, a desired thickness or density can be selected, and the other parameters can be varied to achieve the given specific weight for optimal filtration.

12. The porosity of the filter layers is not the only parameter that determines the degree of separation and storage capacity of the filter layers. Other parameters, such as the fiber structure of the filter layers, are also important. Therefore, it is not necessary for the inventors to specify the porosity of the filter layers in the context of the claimed invention. It is important only that the filter layers have an increasing degree of separation and a decreasing storage capacity, and their specific weights are in the claimed ranges. One of ordinary skill in the art can then select the thickness, density, porosity and other parameters in accordance with the teaching of the subject application and the requirements of the specific application. In fact, if the inventors were to specify the porosity (or thickness and density) of the filter layers in the claims, a competitor could easily design around the patent by selecting a different porosity (or thickness and density) to achieve the same result.

13. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

13/06/2002
Date

G.-M. Klein
Dr. Gunnar-Marcel Klein